What Is Claimed Is:

1. A constant velocity joint in the form of a counter track joint comprising:

an outer joint part (12) comprising a first longitudinal axis (La), an attaching end and an aperture end which are positioned axially opposite one another, as well as first outer ball tracks (22) and second outer ball tracks (24);

an inner joint part comprising a second longitudinal axis (Li), an attaching mechanism for a shaft pointing towards the aperture end of the outer joint part (12), as well as first inner ball tracks (23) and second inner ball tracks (25), the first outer ball tracks (22) and the first inner ball tracks (23) form first pairs of tracks with one another, the second outer ball tracks (24) and the second inner ball tracks (25) form second pairs of tracks with one another, and the first and second pairs of tracks each accommodate a torque transmitting ball (14); and

a ball cage (15) positioned between the outer joint part (12) and the inner joint part (13) including circumferentially distributed cage windows (18) which each receive at least one of the torque transmitting balls (14);

wherein the centers of the balls (14) are held by the cage (15) in a central ball plane (EK), and the travel of the centers of the balls (14) in the ball tracks is defined as the center line (M) of the respective ball tracks;

when the joint is in the aligned condition, an opening angle (α) of the first pairs of tracks (22, 23) opens from the aperture end to the attaching end;

when the joint is in the aligned condition, an opening angle (β) of the second pairs of tracks (24, 25) opens from the attaching end to the aperture end; and

wherein the first pairs of tracks (22, 23) are configured such that, when the joint is articulated, the opening angle (α) of the first pairs of tracks, at a ball (14) entering the outer joint part (12) beyond the central plane (EM), initially becomes zero and then opens towards the aperture end.

2. A constant velocity joint according to claim 1, wherein the first pairs of tracks (22, 23) are configured such that, when the joint is articulated, the opening angle (α) of the first pairs of tracks, at a ball (14) entering the outer joint part (12) beyond the central plane (EM), changes at a substantially constant rate.

3. A constant velocity joint in the form of a counter track joint comprising:

an outer joint part (12) comprising a first longitudinal axis (La), an attaching end and an aperture end which are positioned axially opposite one another, as well as first outer ball tracks (22) and second outer ball tracks (24);

an inner joint part comprising a second longitudinal axis (Li), an attaching mechanism for a shaft pointing towards the aperture end of the outer joint part (12), as well as first inner ball tracks (23) and second inner ball tracks (25), the first outer ball tracks (22) and the first inner ball tracks (23) form first pairs of tracks with one another, the second outer ball tracks (24) and the second inner ball tracks (25) form second pairs of tracks

with one another, and the first and second pairs of tracks each accommodate a torque transmitting ball (14); and

a ball cage (15) positioned between the outer joint part (12) and the inner joint part (13) including circumferentially distributed cage windows (18) which each receive at least one of the torque transmitting balls (14);

wherein the centers of the balls (14) are held by the cage (15) in a central ball plane (EK), and the travel of the centers of the balls (14) in the ball tracks is defined as the center line (M) of the respective ball tracks;

when the joint is in the aligned condition, an opening angle (α) of the first pairs of tracks (22, 23) opens from the aperture end to the attaching end;

when the joint is in the aligned condition, an opening angle (β) of the second pairs of tracks (24, 25) opens from the attaching end to the aperture end; and

wherein the track center lines (M22) of the first outer ball tracks (22) of the first pairs of tracks, centrally, comprise a first arch with a first radius (R2) whose center is offset by a first axial offset (O1) from the central plane (EM) of the joint towards the attaching end and wherein, in the region adjoining said first arch, towards the attaching end, they increasingly deviate radially inwardly from said first radius (R2) and wherein the track center lines (M23) of the first inner ball tracks (23) of the first pairs of tracks, centrally, comprise a second arch with a second radius (R2') whose center is offset by a second axial offset (O2) from the central plane (EM) of the joint towards the aperture end, and wherein, in the region adjoining said second arch towards the aperture end, they increasingly deviate radially inwardly from said second radius (R2').

4. A constant velocity joint according to claim 3, wherein the track center lines (M22) of the first outer ball tracks (22), in the region adjoining the first arch with the first radius (R2) towards the attaching end, comprise a third arch with a smaller radius (R3) which steadily adjoins the former, and wherein the track center lines (M23) of the first inner ball tracks, in the region adjoining the second arch with the second radius (R2'), towards the aperture end, comprise a fourth arch with a smaller radius (R3') which steadily adjoins the former.

5. A constant velocity joint according to claim 3, wherein the track center lines (M22) of the first outer ball tracks (22) of the first pairs of tracks, in the region adjoining the first arch with the first radius (R2), towards the aperture end, increasingly deviate radially outwardly from said first radius (R2) and wherein the track center lines (M23) of the first inner ball tracks (23), in the region of the second arch with the second radius (R2'), towards the attaching end, increasingly deviate outwardly from said second radius (R2').

6. A constant velocity joint according to claim 5, wherein the track center lines (M22) of the first outer ball tracks (22), in the region adjoining the first arch with the first radius (R2), towards the aperture end, comprise a third arch with a third radius (R1) which continuously adjoins the former and whose center is positioned outside the second radius (R2), and wherein the track center lines (M23) of the first inner ball tracks (23), in the region adjoining the second arch with the second radius (R2'), towards the attaching end, comprise a fourth radius (R1') which continuously

adjoins the former and whose center is positioned outside the second radius (R2').

7. A constant velocity joint according to claim 3, wherein the track center lines (M24) of the second outer ball tracks (24) of the second pairs of tracks, centrally, comprise a fifth arch with a fifth radius (R5) whose center is offset by a third axial offset (O3) from the central plane (EM) of the joint towards the aperture end and wherein, in the region adjoining said fifth arch towards the aperture end, they increasingly deviate radially outwardly from said fifth radius (R5) and wherein the track center lines (M25) of the second outer ball tracks (25) of the second pairs of tracks, centrally, comprise a sixth arch with a sixth radius (R5') whose center is offset by a fourth axial offset (O4) from the central plane (EM) of the joint towards the attaching end, and that, in the region adjoining said sixth arch towards the attaching end, they increasingly deviate radially outwardly from said sixth radius (R5').

8. A constant velocity joint according to claim 4, wherein the track center lines (M24) of the second outer ball tracks (24) of the second pairs of tracks, centrally, comprise a fifth arch with a fifth radius (R5) whose center is offset by a third axial offset (O3) from the central plane (EM) of the joint towards the aperture end and wherein, in the region adjoining said fifth arch towards the aperture end, they increasingly deviate radially outwardly from said fifth radius (R5) and wherein the track center lines (M25) of the second outer ball tracks (25) of the second pairs of tracks, centrally, comprise a sixth arch with a sixth radius (R5') whose center is offset by a fourth axial offset (O4) from the central plane (EM) of

the joint towards the attaching end, and that, in the region adjoining said sixth arch towards the attaching end, they increasingly deviate radially outwardly from said sixth radius (R5').

9. A constant velocity joint according to claim 5, wherein the track center lines (M24) of the second outer ball tracks (24) of the second pairs of tracks, centrally, comprise a fifth arch with a fifth radius (R5) whose center is offset by a third axial offset (O3) from the central plane (EM) of the joint towards the aperture end and wherein, in the region adjoining said fifth arch towards the aperture end, they increasingly deviate radially outwardly from said fifth radius (R5) and wherein the track center lines (M25) of the second outer ball tracks (25) of the second pairs of tracks, centrally, comprise a sixth arch with a sixth radius (R5') whose center is offset by a fourth axial offset (O4) from the central plane (EM) of the joint towards the attaching end, and that, in the region adjoining said sixth arch towards the attaching end, they increasingly deviate radially outwardly from said sixth radius (R5').

10. A constant velocity joint according to claim 6, wherein the track center lines (M24) of the second outer ball tracks (24) of the second pairs of tracks, centrally, comprise a fifth arch with a fifth radius (R5) whose center is offset by a third axial offset (O3) from the central plane (EM) of the joint towards the aperture end and wherein, in the region adjoining said fifth arch towards the aperture end, they increasingly deviate radially outwardly from said fifth radius (R5) and wherein the track center lines (M25) of the second outer ball tracks (25) of the second pairs of tracks, centrally, comprise a sixth arch with a sixth radius (R5') whose

center is offset by a fourth axial offset (O4) from the central plane (EM) of the joint towards the attaching end, and that, in the region adjoining said sixth arch towards the attaching end, they increasingly deviate radially outwardly from said sixth radius (R5').

11. A counter track joint according to claim 7, wherein the track center lines (M24) of the second outer ball tracks (24), in the region adjoining the fifth arch with the fifth radius (R5) towards the aperture end, comprise a seventh arch with a seventh radius (R4) which steadily adjoins the former and whose center is positioned outside the fifth radius (R5), and wherein the track center lines (M25) of the second inner ball tracks (25), in the region adjoining the sixth arch with the sixth radius (R5') towards the attaching end, comprise an eighth arch with an eighth radius (R4') which steadily adjoins the former and whose center is positioned outside the sixth radius (R5').

12. A counter track joint according to claim 7, wherein the track center lines (M24) of the second outer ball tracks (24), in the region adjoining the fifth arch with the fifth radius (R5), towards the aperture end, comprise a steadily joining straight line, and wherein the track center lines (M25) of the second inner ball tracks (25), in the region adjoining the sixth arch with the sixth radius (R5') towards the attaching end, comprise a steadily joining straight line.

13. A counter track joint according to claim 1, wherein the track center lines of the ball tracks are positioned in central planes containing the first and second longitudinal axes (La, Li).

14. A counter track joint according to claim 3, wherein the track center lines of the ball tracks are positioned in central planes containing the first and second longitudinal axes (La, Li).

15. A counter track joint according to claim 1, comprising three first pairs of tracks (22, 23) and three second pairs of tracks (24, 25) which are alternately arranged across the circumference.

16. A counter track joint according to claim 3, comprising three first pairs of tracks (22, 23) and three second pairs of tracks (24, 25) which are alternately arranged across the circumference.

17. A counter track joint according to claim 1, comprising four first pairs of tracks (22, 23) and four second pairs of tracks (24, 25) which are alternately arranged across the circumference.

18. A counter track joint according to claim 3, comprising four first pairs of tracks (22, 23) and four second pairs of tracks (24, 25) which are alternately arranged across the circumference.